

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A sintered body, comprising:
 sintered metal particles forming a sintered structure and having a maximum particle size of 100 μm or smaller; and
 carbon being dispersed in the sintered structure in an amount of 0.05 to 1.0% by mass based on a total mass of the sintered body.
2. (Original) A sintered body according to Claim 1, wherein the sintered body has been heat-treated.
3. (Original) A sintered body according to Claim 1, wherein the sintered body forms at least teeth of a sprocket of a silent chain.
4. (Original) A sintered body according to Claim 1, wherein the sintered body is a high-strength part of an internal combustion engine.
5. (Currently amended) A sintered body having a sintered structure of sintered metal particles derived from a metal powder and containing carbon dispersed in the sintered structure in an amount of 0.05 to 1.0% by mass based on a total mass of the sintered body, the sintered metal particles having a maximum particle size of 100 μm or smaller, and the metal powder having a particle size of 75 μm or smaller.
6. (Original) A sintered body according to Claim 5, wherein the sintered body has been heat-treated.
7. (Original) A sintered body according to Claim 5, wherein the sintered body forms at least teeth of a sprocket of a silent chain.

8. (Original) A sintered body according to Claim 5, wherein the sintered body is a high-strength part of an internal combustion engine.

9. (Currently amended) A sintered body produced from a metal powder mixture and having a sintered structure of sintered metal particles, the metal powder mixture including a metal powder having a particle size of 75 μm or smaller, a graphite powder in an amount 0.1 to 1.0% by mass and a powder lubricant in an amount of 0.05 to 0.80% by mass based on a total mass of the metal powder mixture, and the sintered metal particles having a maximum particle size of 100 μm or smaller.

10. (Original) A sintered body according to Claim 9, wherein the sintered body has been heat-treated.

11. (Original) A sintered body according to Claim 9, wherein the sintered body forms at least teeth of a sprocket of a silent chain.

12. (Original) A sintered body according to Claim 9, wherein the sintered body is a high-strength part of an internal combustion engine.

13. (Currently amended) A production method of a sintered body, comprising:

preparing a metal powder mixture, the metal powder mixture including a fine metal powder having a particle size of 75 μm or smaller, a graphite powder in an amount of 0.1 to 1.0% by mass and a powder lubricant in an amount of 0.05 to 0.80% by mass based on a total mass of the metal powder mixture;

compacting the metal powder mixture to provide a green compact; and

sintering the green compact,

wherein the sintered body has a sintered structure of sintered metal particles of 100 μm or smaller in maximum particle size.

14. (Cancelled)

15. (Original) A production method according to Claim 13, wherein the sintered body contains carbon in an amount of 0.05 to 1.0% by mass based on a total mass of the sintered body.

16. (Original) A production method according to Claim 13, wherein the metal powder is a blend of an iron-based powder and an alloying metal powder.
17. (Original) A production method according to Claim 13, wherein said preparing includes granulating the metal powder to form primary particles having a particles size of 75 μm or smaller into secondary particles having a particle size of 180 μm or smaller.
18. (Original) A production method according to Claim 13, wherein the metal powder mixture is compacted while being heated to a temperature of 100 °C or higher.
19. (Original) A production method according to Claim 18, wherein said compacting includes preheating a die to a temperature of 120 °C or higher, and then, compressing the metal powder mixture into the preheated die.
20. (Original) A production method according to Claim 13, wherein said compacting includes applying a die lubricant to a die, and then, compressing the metal powder mixture into the die.
21. (Original) A production method according to Claim 13, wherein the green compact is sintered at a temperature of 1180 °C or higher.
22. (Original) A production method according to Claim 13, further comprising heat-treating the sintered compact.
23. (New) A sintered body according to Claim 9, wherein the sintered body contains carbon dispersed in the sintered structure in an amount of 0.05 to 1.0% by mass based on a total mass of the sintered body.
24. (New) A sintered body according to Claim 13, wherein the sintered body forms at least teeth of a sprocket of a silent chain.
25. (New) A sintered body according to Claim 13, wherein the sintered body is a high-strength part of an internal combustion engine.